

PTO/SB/05 (08-03)  
Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

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<b>UTILITY PATENT APPLICATION TRANSMITTAL</b>  <i>(Only for new nonprovisional applications under 37 CFR 1.53(b))</i>	Attorney Docket No.	
	First Inventor	Roarty, Brian P.
	Title	Implementation and Application of Phase Ch
	Express Mail Label No.	EU727597507

<b>APPLICATION ELEMENTS</b> See MPEP chapter 600 concerning utility patent application contents.	<b>ADDRESS TO:</b> Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450
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1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
*(Submit an original and a duplicate for fee processing)*
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 22]  
*(preferred arrangement set forth below)*
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings *(if filed)*
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 8]
5. Oath or Declaration [Total Sheets 2]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
*(for continuation/divisional with Box 18 completed)*
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program *(Appendix)*
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ Paper
  - c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of Attorney  
*(when there is an assignee)*
11. ☐ English Translation Document *(if applicable)*
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☐ Return Receipt Postcard (MPEP 503)  
*(Should be specifically itemized)*
15. ☐ Certified Copy of Priority Document(s)  
*(if foreign priority is claimed)*
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Itemization and SASE

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Prior application information: Examiner \_\_\_\_\_ Art Unit: \_\_\_\_\_  
For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**

☐ Customer Number: 37387 OR ☐ Correspondence address below

Name	George S. Cole, Esq.				
Address	495 Seaport Court, Suite 101				
City	Redwood City	State	CA	Zip Code	94063
Country	USA	Telephone	(650) 556-9510	Fax	(650) 556-9511
Name (Print/Type)	George S. Cole	Registration No. (Attorney/Agent)	40,563		
Signature	<i>George S. Cole</i>			Date	3/10/04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

21861 U.S. PTO  
031004

# FEE TRANSMITTAL for FY 2003

Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**446.00**

## Complete if Known

Application Number  
Filing Date **March 10, 2004**  
First Named Inventor **Roarty, Brian P.**  
Examiner Name  
Art Unit  
Attorney Docket No.

## METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

**50-0705**

**George S. Cole, Esq.**

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 740	2001 370	Utility filing fee	\$385
1002 330	2002 165	Design filing fee	
1003 510	2003 255	Plant filing fee	
1004 740	2004 370	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1) (\$)			<b>385.00</b>

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below	Fee Paid
Total Claims	23	-20** =	3	X 9	= \$18.00
Independent Claims	4	-3** =	1	X 43	= \$43.00
Multiple Dependent					

<u>Large Entity</u>		<u>Small Entity</u>		<u>Fee Description</u>
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 400	2252 200	Extension for reply within second month	
1253 920	2253 460	Extension for reply within third month	
1254 1,440	2254 720	Extension for reply within fourth month	
1255 1,960	2255 980	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,280	2453 640	Petition to revive - unintentional	
1501 1,280	2501 640	Utility issue fee (or reissue)	
1502 460	2502 230	Design issue fee	
1503 620	2503 310	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 740	2809 370	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 740	2810 370	For each additional invention to be examined (37 CFR 1.129(b))	
1801 740	2801 370	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**0**

## SUBMITTED BY

Name (Print/Type) **George S. Cole** Registration No. **40,563** Telephone **(650) 556-9510**  
Signature *George S. Cole* Date **3/10/04**

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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George S. Cole, Esq.  
(650) 556-9510 (650) 556-9511 FAX

495 Seaport Court, Suite 101  
Redwood City, CA 94063

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Mail Stop PATENT APPLICATIONS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Mar. 10th, 2004

Re: Patent Application for  
"Implementation and Application of Phase Change in a Fluid Flowing Through A Nozzle"  
Brian Roarty, Inventor

Dear Sirs:

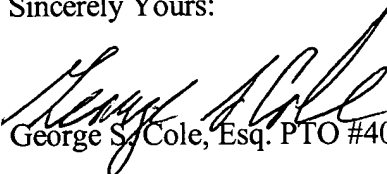
On March 10th, 2004, I am sending by Express Mail the above application.

The above-named inventor and application qualify for and assert small entity status.

I hereby authorize use of my deposit account, 500705, with User ID FINA, to cover all necessary fees and costs for this application.

I ask that on receipt the enclosed checklist of received materials be filled out and returned using the self-addressed, stamped envelope I have enclosed.

Sincerely Yours:

  
George S. Cole, Esq. PTO #40,563

# EXPRESS MAIL CERTIFICATE

"Express Mail" mailing label No: \_\_\_\_\_ EU727597507US \_\_\_\_\_

Date of Deposit: \_\_\_\_\_ Mar. 10th, 2003 \_\_\_\_\_

I hereby certify that the following documents:

- 
- attorney cover letter;
  - a transmittal cover;
  - a power of attorney;
  - an inventor's declaration;
  - a fee transmittal, with authorization to charge a deposit account;
  - an Information Disclosure Statement;
  - a specification with 22 pages
  - claims;
  - 12 drawings on 8 separate sheets,
  - payment (check or Deposit Account Authorization or both);
  - a copy of the Express Mail Certificate;
  - itemization of what was received by the US PTO

and,

- a SASE return envelope for the above itemization

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are being deposited in a single envelope with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and such envelope is addressed to:

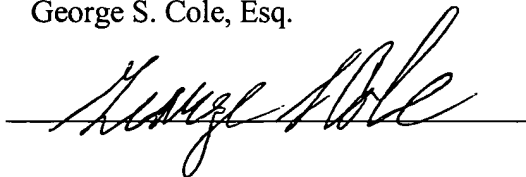
**MAIL STOP PATENT APPLICATION**

**Commissioner for Patents**

**P.O. BOX 1450**

**Alexandria, VA 22313-1450.**

George S. Cole, Esq.



## Itemization of Mailing

"Express Mail" mailing label No: \_\_\_\_\_ EU727597507US \_\_\_\_\_

Date of Deposit: \_\_\_\_\_ Mar. 10th, 2003 \_\_\_\_\_

I hereby certify that the following documents:

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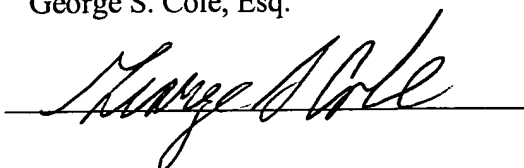
**MAIL STOP PATENT APPLICATION**

**Commissioner for Patents**

**P.O. BOX 1450**

**Alexandria, VA 22313-1450.**

George S. Cole, Esq.



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